

VALID

Pat. No. 05784431 - 8
Issue Date: 07/21/98

Group ID: F Page 1
User ID: 0731AQ KS: 2,224

Warning [Pages Of US References:]

page 3 has no references

page 4 has no references

Warning [Pages Of Foreign References:]

page 1 has no references

page 2 has no references

page 3 has no references

page 4 has no references

Warning [Pages Of Other References:]

page 1 has no references

Warning [Blue Slip Class Versus Class:]

has Class from Blue Slip that does not match Class from Jacket

Warning [Blue Slip Sub Class Versus Sub Class:]

has SubClass from Blue Slip that does not match SubClass from Jacket

CHECK LIST

Rule 47 Continuing Data PCT Disclaimer

No No No No

Foreign Priority Claimed: No

Acknowledged: No

State Code: PA Country Code:

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JACKET

<u>SERIAL NUMBER</u>	<u>FILING DATE</u>	<u>CLASS</u>	<u>SUBCLASS</u>	<u>GAU</u>
8739622	10/29/96	378	65	2506

<u>FOREIGN COUNTRY</u>	<u>PRIORITY Document Number</u>	<u>Date</u>
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DISCLAIMER

/ /

TITLE

Apparatus for matching X-ray images with reference images

MICROFICHE APPENDIX

ASSISTANT EXAMINER:

<u>First:</u>	<u>Middle:</u>	<u>Last:</u>
David	Vernon	Bruce

PRIMARY EXAMINER:

<u>First:</u>	<u>Middle:</u>	<u>Last:</u>
David	P.	Porta

CLAIMS ALLOWED

<u>Total</u>	<u>Print</u>
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28	21
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DRAWINGS

<u>Sheets</u>	<u>Figures</u>	<u>Print</u>
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8 13 Y

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BLUE SLIP INFORMATION

<u>SERIAL NUMBER</u>	<u>CLASS</u>	<u>SUBCLASS</u>	<u>GAU</u>
8739622	375	69	2506

<u>INDEP. CLAIMS</u>	<u>TOTAL CLAIMS</u>
1,21,26	28

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BLUE SLIP (Page 1)

INTERNATIONAL CLASSIFICATION

<u>Class</u>	<u>SubClass</u>
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A61N	5/10
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CROSS-REFERENCES

<u>Class</u>	<u>SubClass</u>
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378	69;901
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FIELD OF SEARCH

<u>Class</u>	<u>SubClass</u>
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378	8;20;69;68;401
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PTOL85b INFO

<u>SERIAL NUMBER</u>	<u>FILING DATE</u>
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8739622	10/29/96
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ASSIGNEE DATA PRESENT

Yes

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ATTORNEYS

<u>Type:</u>	<u>Firm/First:</u>	<u>Middle:</u>	<u>Last:</u>
Individual	Richard	V.	Westerhoff
Firm	Eckert Seamans Cherin & Mellot, LLC		

=====
ASSIGNEES

<u>Code:</u>	<u>Firm/First:</u>	<u>Middle:</u>	<u>Last:</u>
02	University of Pittsburgh of the Commonwealth System of Higher Education		
<u>City:</u>	<u>State:</u>	<u>Country:</u>	
Pittsburgh	PA		
<u>Text:</u>			

=====
OATH

<u>INVENTOR NAME</u>			
<u>First:</u>	<u>Middle:</u>	<u>Last:</u>	<u>Signed:</u>
Andre	M.	Kalend	Yes
<u>City:</u>	Monroeville		

<u>INVENTOR NAME</u>			
<u>First:</u>	<u>Middle:</u>	<u>Last:</u>	<u>Signed:</u>
Joel		Greenberger	Yes
<u>City:</u>	Sewickley		

<u>INVENTOR NAME</u>			
<u>First:</u>	<u>Middle:</u>	<u>Last:</u>	<u>Signed:</u>
Karun	B.	Shimoga	Yes
<u>City:</u>	Pittsburgh, all of		

State: PA ZIP Code: Country: Foreign ZIP:

INVENTOR NAME

<u>First:</u>	<u>Middle:</u>	<u>Last:</u>	<u>Signed:</u>
Charalambos	N.	Athanassiou	Yes

City: Athens

State: ZIP Code: Country: GRX Foreign ZIP:

INVENTOR NAME

<u>First:</u>	<u>Middle:</u>	<u>Last:</u>	<u>Signed:</u>
Takeo		Kanade	Yes

City: Pittsburgh

State: PA / ZIP Code: Country: Foreign ZIP:

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PCT INFO

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CONTINUING DATA (Page 1)

<u>LINE</u>	<u>CODE</u>	<u>SERIAL NUMBER</u>	<u>FILING DATE</u>	<u>STATUS</u>	<u>DOCUMENT NO.</u>	<u>ISSUE DATE</u>
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REFERENCES (Page 1) SERIAL NUMBER: 8739622

U.S. REFERENCES

<u>U.S. Pat No.</u>	<u>Date</u>	<u>Patentee</u>	<u>Class</u>	<u>SubClass</u>
5,315,630 /	05/1994	Strum et al. /	378 /	65 /

FOREIGN REFERENCES

<u>Foreign Doc No.</u>	<u>Date</u>	<u>Country</u>	<u>Class</u>	<u>SubClass</u>
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OTHER REFERENCE CITATIONS (incl. Author, Title, Date, Pertinent Pages, etc.)

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REFERENCES (Page 2) SERIAL NUMBER: 8739622

U.S. REFERENCES

<u>U.S. Pat No.</u>	<u>Date</u>	<u>Patentee</u>	<u>Class</u>	<u>SubClass</u>
4,995,068 ✓	02/1991 ✓	Chou et al. ✓	378 ✓	189 ✓
5,398,684 ✓	03/1995 ✓	Hardy ✓	128 ✓	653.1 ✓

FOREIGN REFERENCES

<u>Foreign Doc No.</u>	<u>Date</u>	<u>Country</u>	<u>Class</u>	<u>SubClass</u>
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[i Pseudocorrelation: A fast, robust, absolute, grey-level image alignment algorithm, [l Medical Physics, vol. 21, No. 6, R. Radcliffe et al., pp. 761-769, Jun., 1994.

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A Framework for the Robust Estimation of Optical Flow, Black, Michael J., Proc. Fourth Int. Conf. on Computer Vision (ICCV[3 93), Berlin, Germany-May 1993. 
